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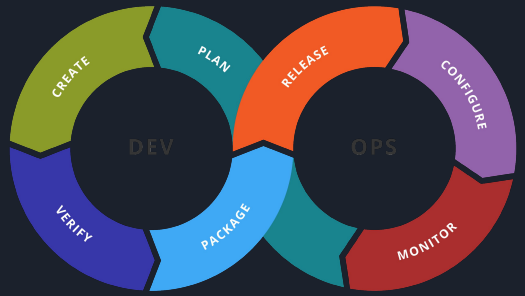
Towards automation: CI/CD



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Proposal Introduction

Proposal: Build an CI/CD automated pipeline.

Main benefits:

- Reduce costs
- Avoid costs
- Revenue Increase
- Customer satisfaction.

Duration: 4 months

Resources required:

- A CI/CD tool (Circle CI), Monitoring service (Prometheus), Github
- 3 developers (full time) to develop - duration 3 months
- 1 developer (part-time) to maintain

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Benefits - Reduce Costs

Business value: Reduce costs

CI/CD solution achievements:

1. Catch compile errors after merge

   Goal: Developer efficiency - Developers need to spend less time on fixing issues

2. Automated infrastructure cleanup

   Goal: Reduce timespan of unused infrastructure

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Benefits - Avoid Costs

Business value: Avoid costs

CI/CD solution achievements:

1. Automated unit testing

   Goal: Less production bugs/issues

2. Detect security vulnerabilities

   Goal: Prevent security issues that will affect customer satisfaction

3. Automated Infrastructure setup

   Goal: Faster deployments and elimination of the possibility of a human error

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Benefits - Revenue Increase

Business value: Revenue Increase - customer satisfaction

CI/CD solution achievements:

1. Faster deployment to production

   Goal: Less time to market. New features can quickly be available to customers

2. Automated smoke tests

   Goal: Catch early a bug, reducing the system downtime

3. Rollback in case of failure

   Goal: Quickly revert latest changes to a previous working stable version